

CLAIMS

1. A transmission method for transmission of data in a telecommunication network,

5 said network comprising a core network (CN) and an access network (AN),

with said access network (AN) comprising

at least one access system (RAN, BSS) of a GSM based access system type;

10 wherein said data are transmitted between said core network (CN) and said at least one access system (BSS) of a GSM based access system type of said access network (AN) via an Iu interface (Iu-I/F).

15 2. A method according to claim 1, wherein each of said at least one access system (RAN, BSS) comprises at least one transceiver device (BS) and an associated transceiver control device (RNC/BSC), and wherein data are transmitted within each of said at least one access system
20 (RAN, BSS) via an Iub and/or an Iur interface in a frame format which is the same as the one adopted for said Iu interface (Iu-IF).

25 3. A method according to claim 1, wherein data are transmitted via said interface as coded data which are coded as specified by the UMTS (Universal Mobile Telecommunication System) specifications or as coded data which are coded according to GSM specifications.

30 4. A method according to claim 3, wherein said transmitted data coded according to GSM specifications are transmitted via said interface using a specified transport frame adapted to the transmission of GSM speech data and circuit switched data.

5. A method according to claim 4, wherein said transport frame is a speech frame, an O&M frame, a data frame, or an extended data frame based on the specification in GSM recommendation GSM 08.60, GSM 08.61, or GSM 08.62.

6. A telecommunication network, comprising a core network (CN) and an access network (AN), with said access network (AN) comprising at least one access system (RAN, BSS) of a GSM based access system type; wherein said core network (CN) is connected to said at least one access system (RAN, BSS) of a GSM based access system type of said access network (AN) via an Iu interface (Iu-I/F).

7. A network according to claim 6, wherein each of said at least one access system (RAN, BSS) comprises at least one transceiver device (BS) and an associated transceiver control device (RNC/BSC), and wherein data are transmitted within each of said at least one access system (RAN, BSS) via an Iub and/or an Iur interface in a frame format which is the same as the one adopted for said Iu interface (Iu-IF).

8. A network according to claim 6, wherein said core network (CN) comprises a network element (IWU/TC) adapted to perform transcoding functionality (TC) according to GSM specification as well as a transcoding functionality (IWU) according to UMTS specification.

9. A network according to claim 8, wherein said network element (IWU/TC) is provided with said Iu interface (Iu-I/F) for connection to said access network (AN) and is provided with an A interface (A) for connection to a core network control device (MSC).

10. A network according to claim 8, wherein said
network element (IWU/TC) is a gateway (GW) network element
of said core network (CN) associated to a core network
5 control device (MSC).

11. A network according to claim 7, wherein said
transceiver control device (RNC/BSC) is adapted to perform
a control functionality (BSC) according to GSM
10 specification as well as a control functionality (RNC)
according to UMTS specification.

12. A network according to claim 11, wherein said
transceiver control device (RNC/BSC) is provided with said
15 Iu interface (Iu-I/F) for connection to said core network
(CN).